

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
26 May 2005 (26.05.2005)

PCT

(10) International Publication Number
WO 2005/048221 A1

(51) International Patent Classification⁷: **G09F 9/00**,
H05B 33/10, 33/14, H01L 29/786, 21/288, 27/768, 27/088

(21) International Application Number:
PCT/JP2004/016814

(22) International Filing Date:
5 November 2004 (05.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003-386020 14 November 2003 (14.11.2003) JP

(71) Applicant (for all designated States except US): SEMI-
CONDUCTOR ENERGY LABORATORY CO., LTD.
[JP/JP]; 398, Hase, Atsugi-shi, Kanagawa 2430036 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): YAMAZAKI,
Shunpei [JP/JP]; c/o SEMICONDUCTOR ENERGY
LABORATORY CO., LTD., 398, Hase, Atsugi-shi, Kana-
gawa 2430036 (JP). MAEKAWA, Shinji [JP/JP]; c/o

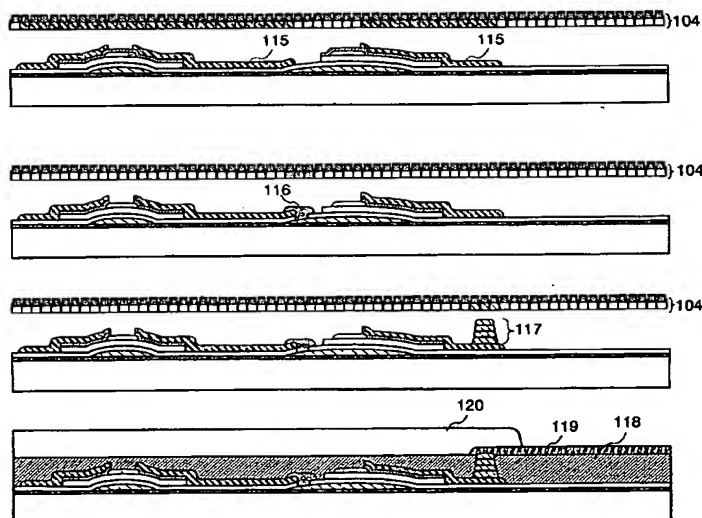
SEMICONDUCTOR ENERGY LABORATORY CO.,
LTD., 398, Hase, Atsugi-shi, Kanagawa 2430036 (JP).
FUJII, Gen [JP/JP]; c/o SEMICONDUCTOR ENERGY
LABORATORY CO., LTD., 398, Hase, Atsugi-shi, Kana-
gawa 2430036 (JP). KUWABARA, Hideaki [JP/JP]; c/o
SEMICONDUCTOR ENERGY LABORATORY CO.,
LTD., 398, Hase, Atsugi-shi, Kanagawa 2430036 (JP).
TACHIMURA, Yuko [JP/JP]; c/o SEMICONDUCTOR
ENERGY LABORATORY CO., LTD., 398, Hase, At-
sugi-shi, Kanagawa 2430036 (JP).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: DISPLAY DEVICE AND METHOD FOR FABRICATING THE SAME



(57) Abstract: It is an object of the invention to provide a display device which can be manufactured by a simplified manufacturing process by which the efficiency in the use of material is improved. It is a further object of the invention to provide a manufacturing method of the display device. It is another object of the invention to provide a fabrication technology for improving adhesion of a pattern. In view of the above problems, according to the present invention, a pattern is formed by a droplet discharge method. Particularly in the invention, base pretreatment is performed before/after a pattern is formed by a droplet discharge method. As a result of such base pretreatment, adhesion of a pattern can be improved, and the pattern may be made finer.



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*